Chapter- 3

Release Information

This chapter identifies the key information about a release that is necessary to determine whether a Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) hazardous substance or pollutant or contaminant is involved, and if not, what other response programs are potentially available to address the release. Module A describes the types of information the Environmental Restoration Program Manager (ERPM) should gather from the initial report in order to categorize the release. Module B describes what materials are covered by CERCLA authority and specific statutory exemptions for Department of Energy (DOE) releases. Module C outlines additional response authorities that may be available under federal and state law to address non-CERCLA materials. The information in this chapter applies to all removal actions.

Contents

3.1 Introduction

3.1.1 Background

Once a release or threat of release is discovered, certain information must be collected to notify the appropriate federal, state, and local authorities and to determine whether CERCLA authority applies. Releases can involve *hazardous substances* as defined in CERCLA section 101(14), *pollutants or contaminants* as defined in CERCLA section 101(33), or *substances not covered* under CERCLA authority, such as petroleum products. Other response authorities may be available under federal and state law to address these non-CERCLA substances, such as the Clean Water Act, which addresses response actions for releases of petroleum products.

You should use this chapter to identify key information about the release or threat of release that is necessary to determine whether a CERCLA hazardous substance or pollutant or contaminant is involved and, if not, what other response programs are available to address the release or threat of release. In addition, this information can be used when reporting releases to the appropriate authorities (see Chapter 4, Module B).

3.1.2 Major Requirements

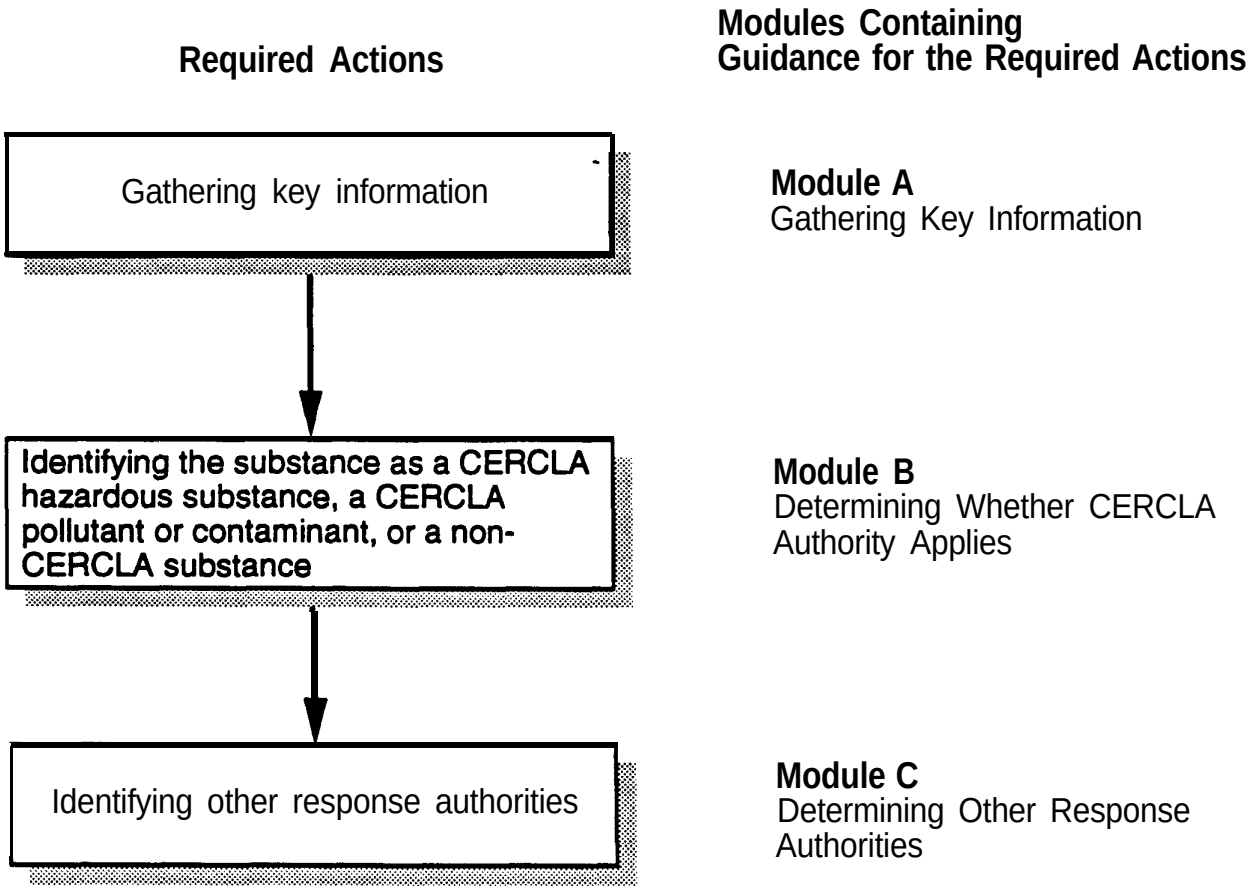
This chapter contains three modules (see Figure 3.1) as follows:

- **Module A: Gathering Key Information.** This module describes the types of information the ERPM should gather from the initial report in order to categorize the release or threat of release.

- **Module B: Determining Whether CERCLA Authority Applies.** This module describes what materials are covered by CERCLA authority and specific statutory exemptions for DOE releases.

- **Module C: Determining Other Response Authorities.** This module outlines additional response authorities that may be available under federal and state law to address a release or threat of release of a non-CERCLA substance.

Figure 3.1
Overview of Chapter 3: Release Information



3.2 Module A: Gathering Key Information

3.2.1 Introduction

Once a release or threat of release has been discovered, DOE should immediately assess the situation and begin to determine if a CERCLA hazardous substance or pollutant or contaminant is involved. DOE personnel gather key information in order to determine if there is a need to act and to complete any required reports. CERCLA response actions can only be taken to respond to a release or threat of release of a CERCLA hazardous substance or pollutant or contaminant. Gathering key information should not be confused with the full-scale removal site evaluation described in the National Contingency Plan (NCP) section 300.410 (see also Chapter 4, Module A, and Chapter 5). During the removal site evaluation, the factors outlined in section 300.415 of the NCP are evaluated to determine the appropriateness of taking a removal action. Key information should be readily available and specific enough to make the necessary notifications under federal and state law, local ordinances, and internal DOE Orders, and to determine if CERCLA authority applies.

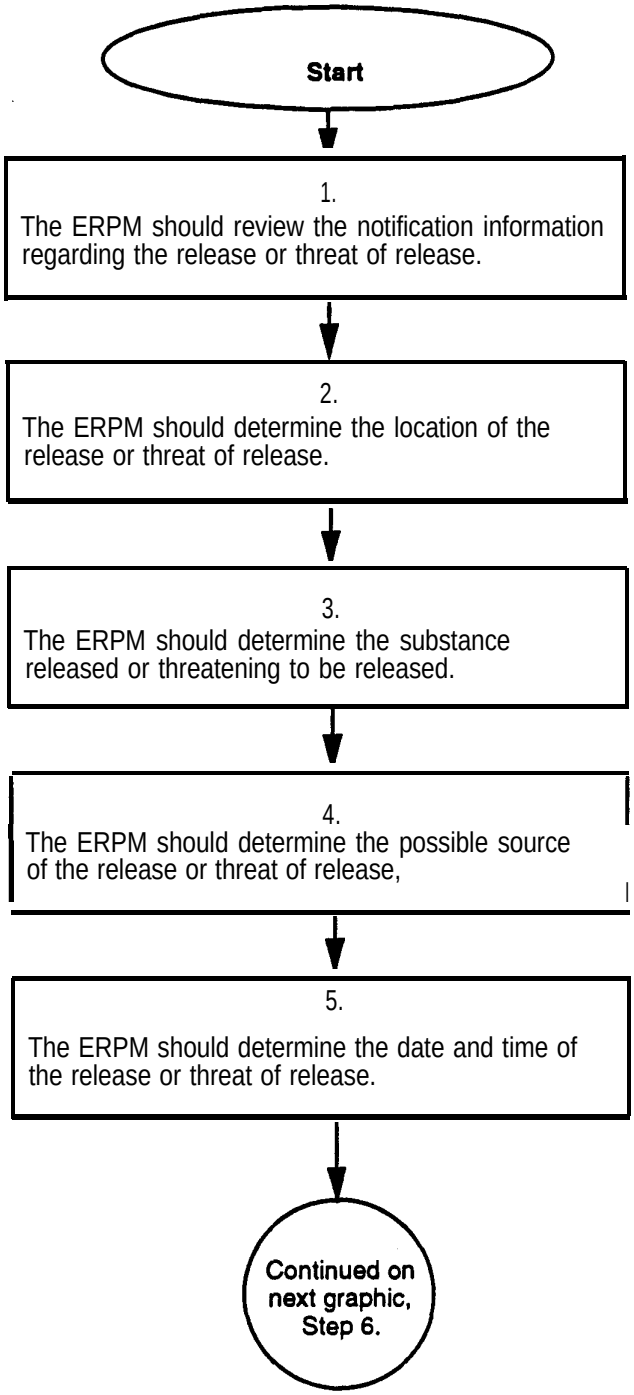
3.2.2 Milestones

The ERPM should answer the following questions by gathering key information:

- **Has the location of the release or threat of release been identified?**
- **Can the types of materials or specific chemicals be determined?**
- **Has an estimate of quantities of materials released or threatening to be released been made?**
- **What was the date and time of the release or threat of release?**
- **What media have been affected by the release or threat of release?**
- **Are there any known risks posed by the release or threat of release?**

The following flowchart guides you through the process of gathering key information.

Figure 3.2(1)
Gathering Key Information



3.2.3 Gathering Key Information

Step 1 As described in Chapter 2, releases can be discovered through National Response Center notification (see sections 300.125 and 300.405 of the NCP) and through DOE facility personnel reports. These notifications often provide useful information for locating and initially characterizing the source and nature of the release or threat of release. These notifications can be written, but often are delivered through telephone conversations that should be documented.

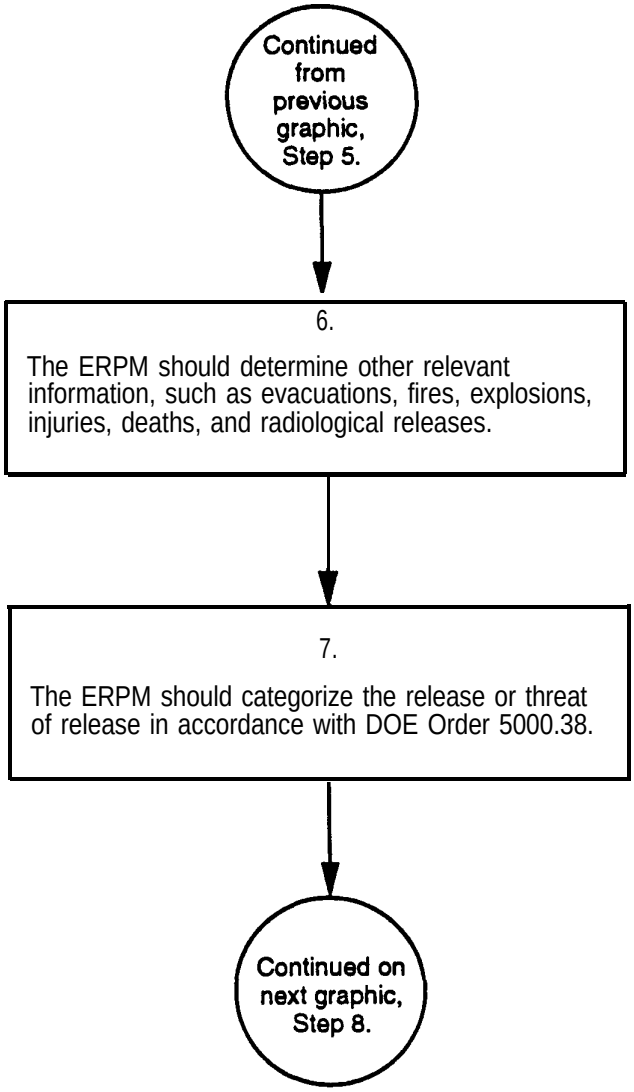
Step 2 The ERPM should attempt to identify the location of the release or threat of release as specifically as possible. Because DOE facilities are large, clear reference points will help response teams locate the release or threat of release quickly. For example, a release location may be identified as follows: the 10,000 gallon aboveground storage tank outside the east wall of 'Building X on the DOE site. If it is not possible to provide specific location references, then the release or threat of release should be identified in terms of circles of potential contamination. For example, a release location may be described as: contaminated soils within a 1,000-foot radius of Transformer Yard No. 7.

Step 3 It may be possible to identify the specific substances at the scene of a release or threat of release based on facility logs, drum labels, and other readily-available information. However, the specific substances may not be evident based on available information and may need to be identified during the removal site evaluation (see Chapter 4, Module A, and Chapter 5). A full-scale on-site evaluation of the release through sampling and analysis should not be conducted at this time. Module B will help the ERPM determine if readily identifiable substances are covered by CERCLA response authorities.

Step 4 The source of the release or threat of release is any area where a hazardous substance or pollutant or contaminant has been deposited, stored, disposed of, or placed, plus any media contaminated by migration. Possible source descriptions include underground storage tanks, 55-gallon drums, ponds, lagoons, or landfills. The exact source may not be evident based on available information and may need to be determined during the removal site evaluation (see Chapter 4, Module A, and Chapter 5).

Step 5 The date and time the release or threat of release was discovered should be available from the notification documentation. If this information is missing, the person who made the initial discovery should be contacted.

Figure 3.2(2)
Gathering Key Information

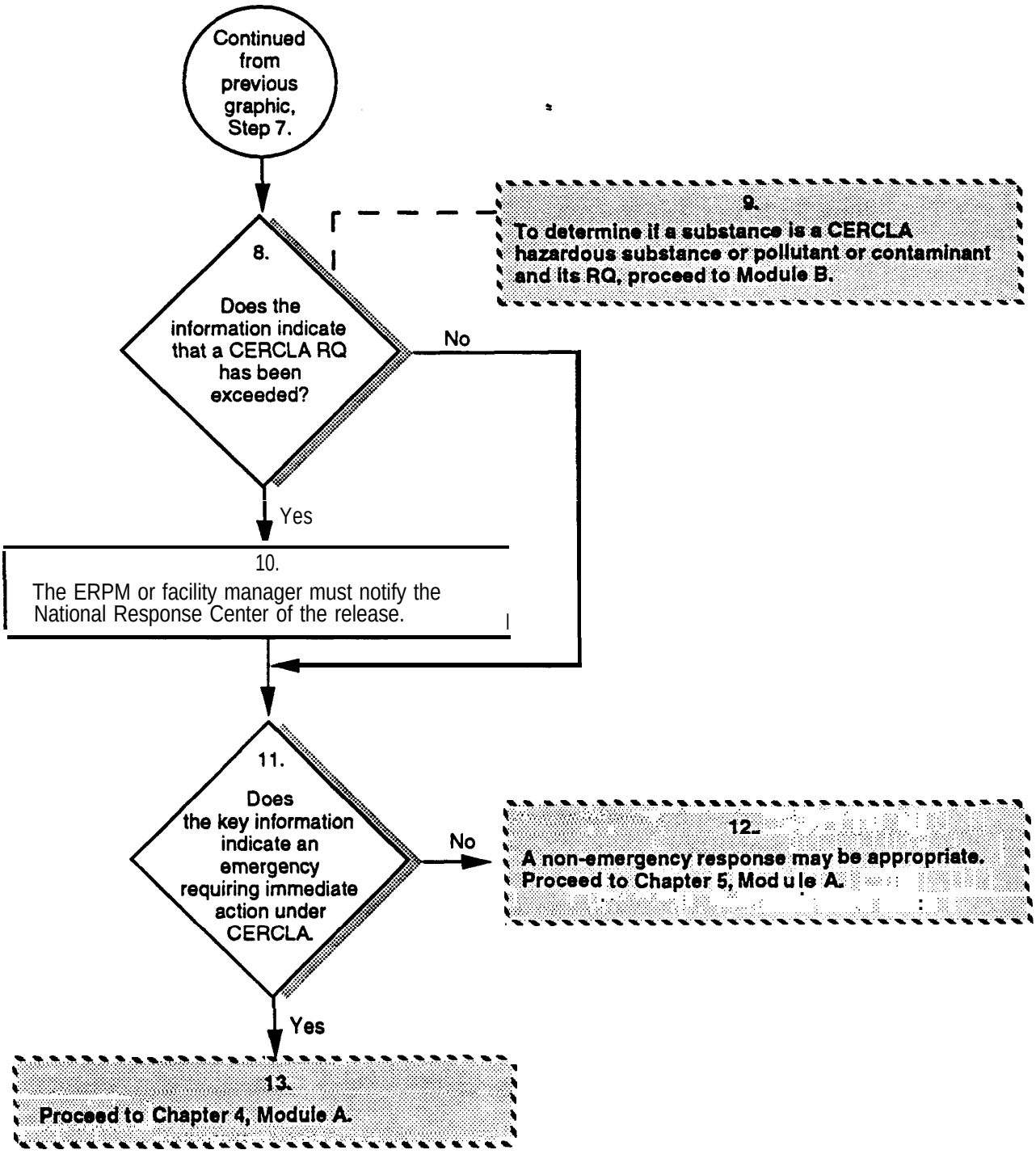


Step 6 The ERPM should gather all other readily available information regarding the release or threat of release that will assist in response decision-making, such as information regarding the occurrence of fires or explosions, quantities of materials released, injuries to workers or surrounding populations, community concerns, and special safety precautions. Each release or threat of release is unique and the amount of available information will vary greatly. If the ERPM determines that a clear emergency exists (e.g., fire/explosion threat; visible, caustic fumes), the ERPM should proceed directly to Chapter 4, Module A, "Removal Site Evaluations For Emergency Situations."

Step 7 DOE Order 5000.3B, "Occurrence Reporting and Processing of Operations Information," (see Appendix A) establishes three categories of environmental occurrences based on their seriousness: (1) environmental emergencies, (2) unusual occurrences, and (3) off-normal occurrences. An environmental emergency is any actual or potential release of material to the environment that results in, or could result in, significant off-site consequences (e.g., need to relocate people, aquifer contamination, or major wildlife change). Unusual occurrences include: (1) a release of a hazardous substance that exceeds its reportable quantity (RQ) and is not federally permitted (see Module B of this chapter for explanation of "federally permitted"); or (2) a release of a hazardous substance or pollutant or contaminant that violates environmental requirements set forth in permits, regulations, and/or DOE Orders. Off-normal occurrences include: (1) a release of a hazardous substance or pollutant or contaminant that is not part of a normal, monitored release and has exceeded 50 percent of the CERCLA RQ for that hazardous substance or pollutant or contaminant; (2) any controlled, uncontrolled, or accidental release that is not an unusual occurrence but is reported to outside agencies (in other than monthly or quarterly reports); or (3) any monitored, controlled release of a hazardous substance occurring under normal operations and exceeding what historical monitoring data and/or analysis suggest would result under normal operations.

The ERPM assists the facility manager in categorizing environmental occurrences. If a clear categorization cannot be made, then the occurrence should initially be categorized at a higher level and adjusted as more information becomes available. DOE Order 5000.3B requires both verbal and written notification of the categorization of a release. Appendix A to this guidance provides a brief summary of the DOE Order, highlighting the time frames for notification and the roles and responsibilities of facility personnel.

Figure 3.2(3)
Gathering Key Information



Step 8 It may be evident from the release notification whether the RQ for a hazardous substance has been exceeded, particularly if the release was discovered through National Response Center notification. The ERPM should only review readily available information to make this determination.

Step 9 It may not be evident from the release notification whether a hazardous substance or pollutant or contaminant has been released or is threatening to be released. The ERPM should review Module B to make this determination, and to identify whether the RQ for a hazardous substance has been exceeded. To assist in determining if an RQ has been exceeded, use the RQ-Calculator.

Step 10 Section 300.125(c) of the NCP requires all releases of hazardous substances equal to or greater than the RQ during a 24-hour period to be reported to the National Response Center immediately. The National Response Center can be reached 24 hours-a-day at (800) 424-8802.

Step 11 Removal actions are taken as soon as possible to abate, prevent, minimize, stabilize, mitigate, or eliminate threats to human health, welfare, or the environment. Emergency situations require immediate actions as a result of an actual or threat of fire or explosion, drinking water contamination, or other acute circumstances. Emergency removal actions are taken where the release requires on-site activities to be initiated within hours of discovering the release and evaluating the need for response.

Step 12 If an emergency situation does not exist, a response may still be appropriate. The ERPM should refer to Chapter 5, “Removal Site Evaluations.”

Step 13 If, based on available information, the ERPM determines that an emergency situation exists, then a removal site evaluation is conducted. The ERPM should refer to Chapter 4, Module A in conducting this evaluation.

3.3 Module B: Determining Whether CERCLA Authority Applies

3.3.1 Introduction

Under section 104(a) of CERCLA, removal actions can be taken whenever: (1) any hazardous substance is released or there is a substantial threat of such a release into the environment; or (2) there is a release or threat of release of a pollutant or contaminant that may present an imminent and substantial danger to public health or welfare.

In determining if there has been a release or a threat of release of a CERCLA hazardous substance or pollutant or contaminant, the ERPM should refer to the definition of *hazardous substance* found in CERCLA section 101(14) and the definition of *pollutant or contaminant* found in CERCLA section 101(33). The reporting and notification requirements and the statutory exemptions to using removal authority vary depending on the substance released or threatened to be released.

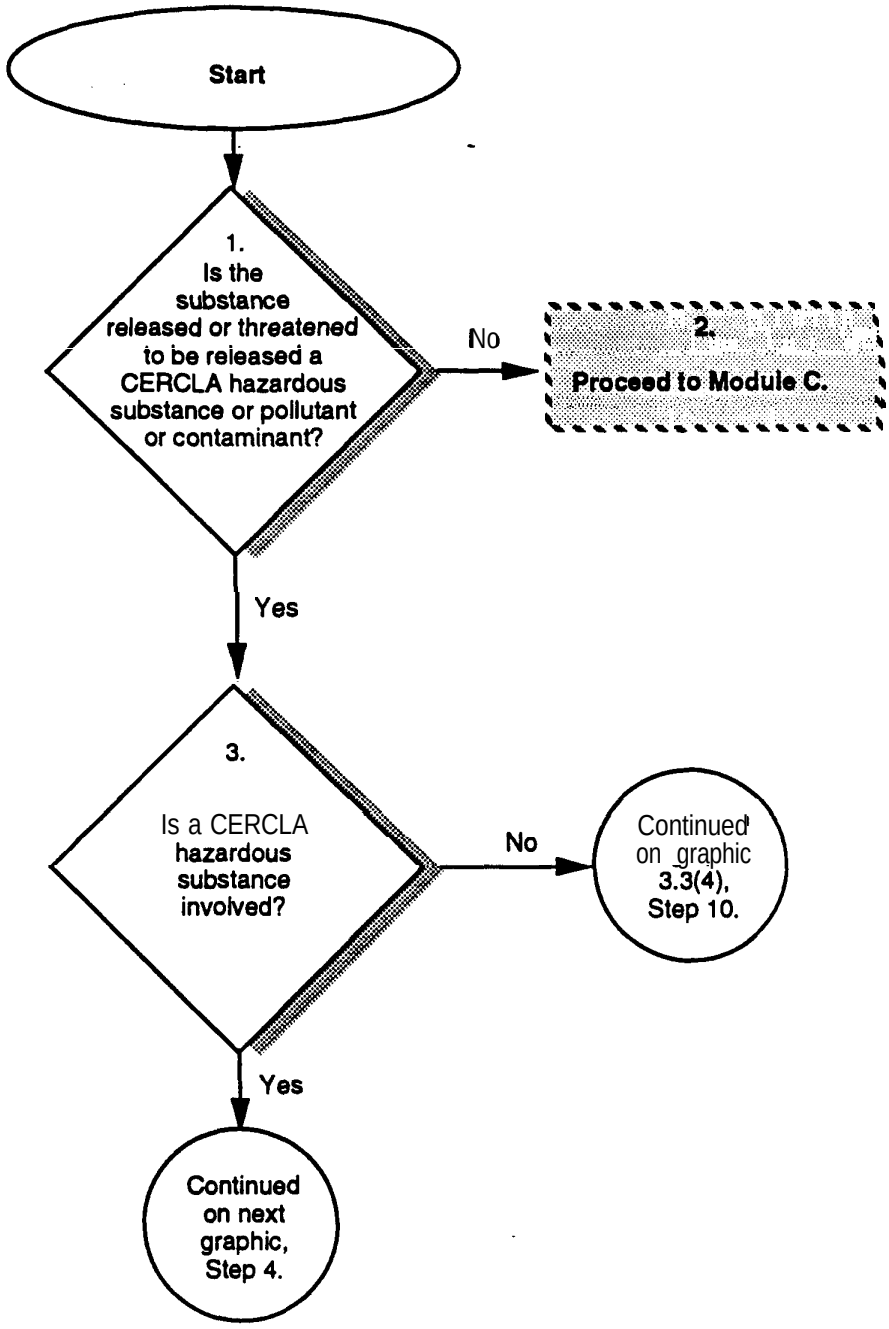
3.3.2 Milestones

In determining if CERCLA authority applies, the ERPM should ask the following questions:

- Is the substance released or threatened to be released defined under CERCLA section 101(14)?
- Is the substance released or threatened to be released defined under CERCLA section 101(33)?
- Are there any relevant exemptions to CERCLA authority?
- Has the RQ been exceeded, thus requiring National Response Center notification?
- Have other appropriate state and local notifications been made?
- Does the release pose an imminent and substantial danger to public health or welfare?

The following flowchart guides you through the process of identifying a CERCLA hazardous substance or pollutant or contaminant and helps you determine reporting requirements and statutory exemptions.

Figure 3.3(1)
Determining Whether CERCLA Authority Applies



3.3.3 Determining Whether CERCLA Authority Applies

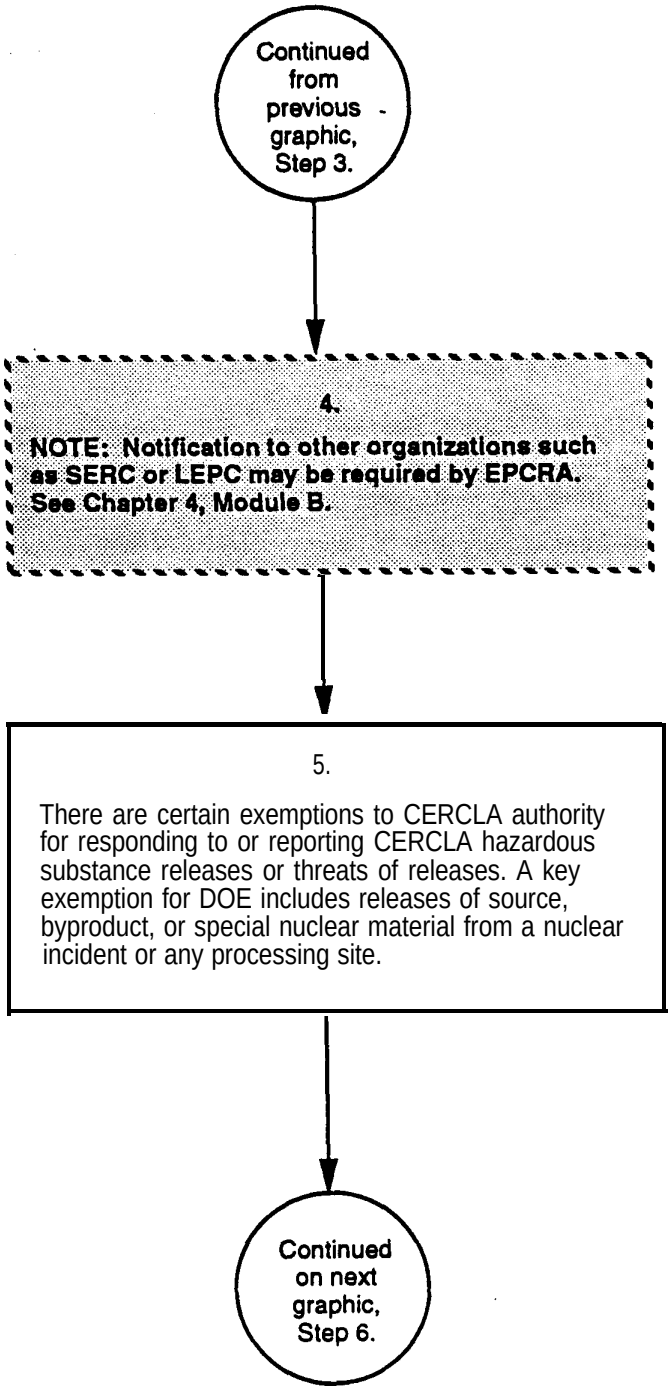
Step 1 If a release or threat of release involves a hazardous substance or pollutant or contaminant and a response is not specifically exempted from CERCLA authority (see Step 5), then a CERCLA removal or remedial action may be appropriate. Limitations on response to releases are described in CERCLA section 104(a)(3). Despite these limitations, section 104(a)(4) allows CERCLA authority to be used if a public health or environmental emergency exists and no other authority can respond in a timely manner.

Step 2 If a release or threat of release does not involve a hazardous substance or pollutant or contaminant and/or the release or threat of release is specifically exempted from CERCLA authority (see Step 5), then a CERCLA removal or remedial action may not be appropriate. The ERPM should refer to Module C, "Determining Other Response Authorities," to determine if a response can be taken under other federal or state law.

Step 3 CERCLA section 101(14) defines the term hazardous substance as: (1) any substance designated pursuant to section 3 1 l(b)(2)(A) of the Clean Water Act (CWA); (2) any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA; (3) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Resource Conservation and Recovery Act (RCRA) (but not including any waste suspended from regulation under section 3001(b) of RCRA); (4) any toxic pollutant listed under section 307(a) of the CWA; (5) any hazardous air pollutant listed under section 112 of the Clean Air Act (CAA); and (6) any imminently hazardous chemical substance or mixture for which action has been taken under section 7 of the Toxic Substances Control Act (TSCA). A complete list of hazardous substances and the RQs established for those substances is found in 40 CFR Table 302.4.

In addition to the exclusion for wastes suspended from regulation under section 3001(b) of RCRA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof, that is not otherwise specifically listed or designated as a hazardous substance, and natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel. Wastes excluded from the CERCLA definition of hazardous substance may change based on court decisions and interpretations of special study wastes under CERCLA 105(g). The ERPM should consult with the DOE Office of Environment, Safety and Health in determining whether a particular waste is excluded from CERCLA.

Figure 3.3(2)
Determining Whether CERCLA Authority Applies

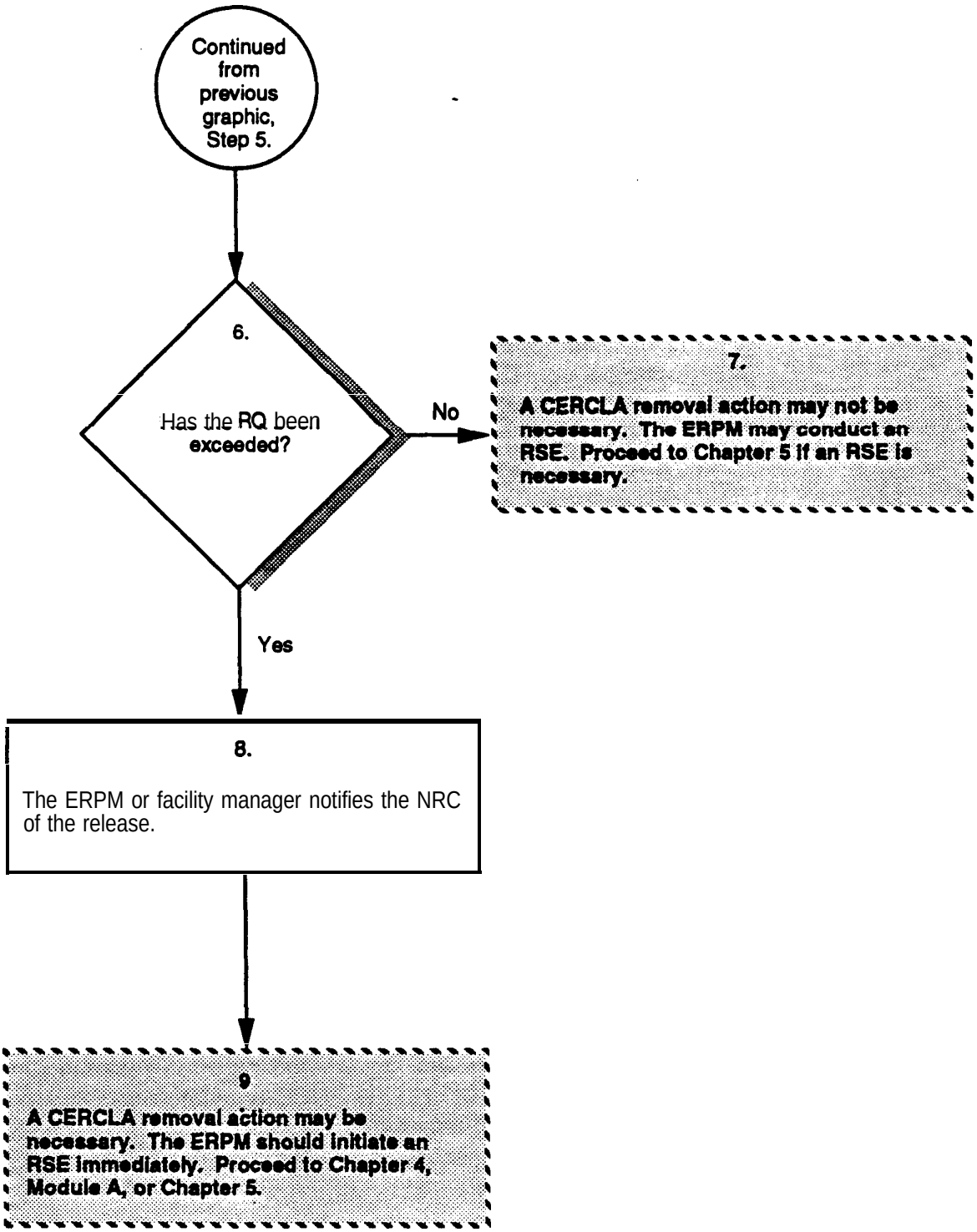


Step 4 Under 40 CFR Parts 350, 355, 370, and 372, "Community Right-to-Know Requirements," the State Emergency Response Commission (SERC) and the Local Emergency Planning Committee (LEPC) must be notified when an amount exceeding established thresholds of an extremely hazardous substance (EHS) exists or is released into the environment [see 40 CFR 355(a)(ii)]. The EHSs are listed in 40 CFR Part 355, Appendices A and B. Releases of reportable quantities of EHSs are subject to reporting to the SERC and LEPC under EPCRA section 304. SERC and LEPC notifications are only required for releases that could result in exposure to persons located outside of the boundary of a facility. In addition to EHSs, the SERC and LEPC must be notified when there is a release of a hazardous substance above the established RQ that could result in exposure to persons outside the facility boundaries. Refer to Chapter 4, Module B for more detail on other requirements for reporting and notifications.

Step 5 Many of the exemptions to CERCLA authority relate specifically to the definition of the term "release.'* Under CERCLA section 101(22), the definition of release excludes from CERCLA notification authority: (1) any release that results in exposure to persons solely within a workplace, with respect to any claim that such persons may assert against the employer, (2) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; (3) release of source, byproduct, or special nuclear material from a nuclear incident, as defined in the Atomic Energy Act of 1954 (AEA), if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of AEA, or, for the purposes of section 104 of CERCLA or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under sections 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA); and (4) the normal application of fertilizer. The ERPM should consult with the DOE Office of Environment, Safety and Health to determine if release circumstances warrant a CERCLA exemption.

Under CERCLA section 101(10), releases of materials authorized by, and in compliance with, permitting programs under RCRA, CWA, CAA, AEA, and other statutes also are exempt from CERCLA notification requirements. However, these federally permitted releases must be in compliance with the specific terms of the permit. Final regulatory requirements for federally permitted releases are under development by U.S. Environmental Protection Agency (EPA). Proposed regulations for federally permitted releases were issued on July 19, 1988 (53 FR 27268) and a supplemental notice was issued on July 11.1989 (54 FR 29306). The ERPM should consult with the DOE Office of Environment, Safety and Health to determine if a release is not subject to CERCLA.

Figure 3.3(3)
Determining Whether CERCLA Authority Applies



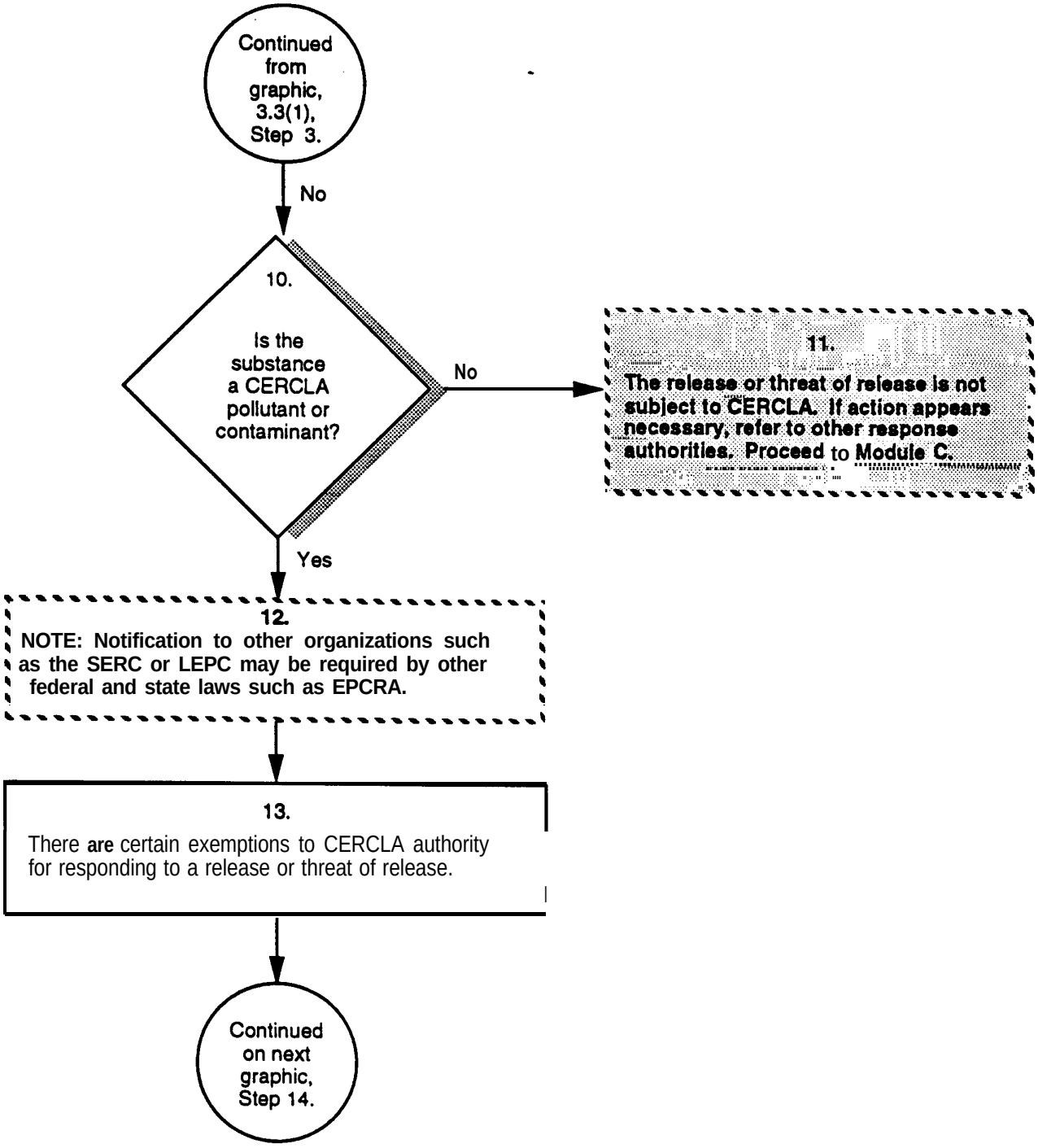
Step 6 As described in Chapter 2, CERCLA responses are taken to address releases of hazardous substances above their RQ. The RQ for each CERCLA hazardous substance is listed in 40 CFR Table 302.4.

Step 7 Releases of hazardous substances below their RQ may not pose a threat to human health, welfare, or the environment. However, the ERPM may decide to conduct an RSE to characterize more fully the contamination concentrations and the pathways of migration and exposure and to take appropriate action to remove or remediate the release. Chapter 4, Module A, and Chapter 5 provide guidance on conducting an RSE.

Step 8 As described in Chapter 2, sections 103(a) and (b) of CERCLA require releases of hazardous substances equaling or exceeding their RQ during a 24-hour period to be reported to the National Response Center. The National Response Center can be reached 24 hours-a-day at (800) 424-8802.

Step 9 Following notification to the National Response Center, the ERPM should initiate an RSE to determine the type of response required, if any (see Chapter 4, Module A, or Chapter 5).

Figure 3.3(4)
Determining Whether CERCLA Authority Applies



Step 10 CERCLA section 101(33) defmes the term pollutant or contaminant to include, but not to be limited to, any element, substance, compound, or mixture, including disease-causing agents, that, after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction), or physical deformations in such organisms or their offspring.

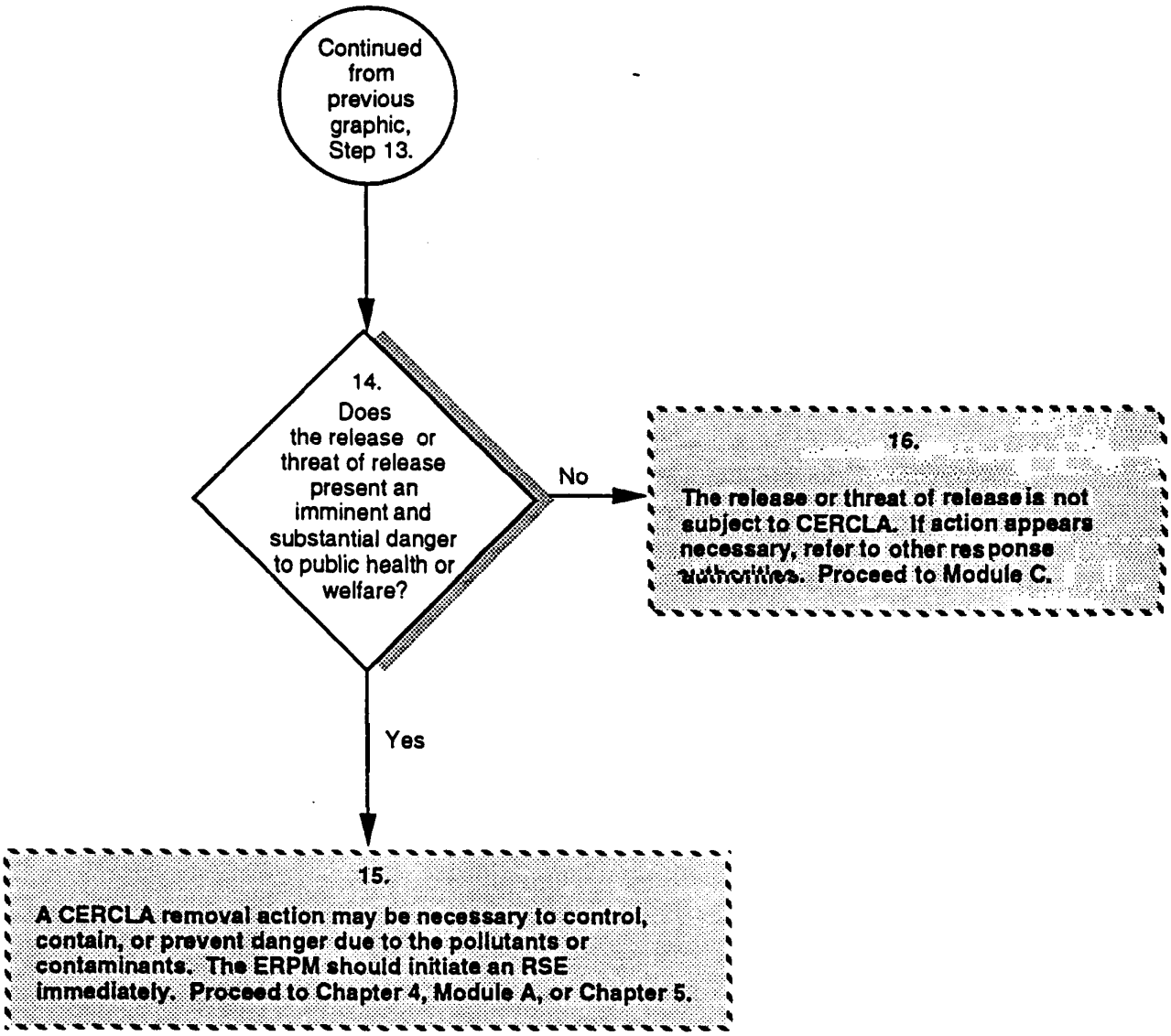
The definition of pollutant or contaminant also excludes petroleum, including crude oil or any fraction thereof, that is not otherwise specifically listed or designated as a hazardous substance under section 101(14)(A) through (F) of CERCLA. This exclusion also applies to natural gas, liquefied natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas). Authority for responding to releases of petroleum products into the waters of the United States is found in the Clean Water Act.

Step 11 If the material released or threatened to be released is neither a hazardous substance nor a pollutant or contaminant, then CERCLA does not apply. Module C provides information on other response authorities that may be available to respond to the material.

Step 12 see step 4.

Step 13 The same exemptions to CERCLA authority apply to pollutants or contaminants as apply to hazardous substances. See Step 5.

Figure 3.3(5)
Determining Whether CERCLA Applies



Step 14 CERCLA responses to address a release or threat of release of a pollutant or contaminant can only be taken if the release or threat of release presents an *imminent and substantial* danger to public health or welfare. In an emergency (e.g., fire/explosion), an imminent and substantial danger is readily apparent In less urgent situations, the removal site evaluation (see or Chapter 5) will help the ERPM determine if an imminent and substantial danger to public health or welfare exists. The NCP does not provide regulatory guidelines for determining whether an imminent and substantial danger to public health and welfare exists. The ERPM should exercise best professional judgment in determining whether an imminent and substantial danger exists. Reportable quantities have not been designated for pollutants or contaminants.

Step 15 If a pollutant or contaminant that presents an imminent and substantial danger to public health or welfare has been released or is threatening to be released, the ERPM should initiate an RSE immediately to determine if a removal action is necessary (see Chapter 4, Module A, or Chapter 5).

Step 16 See **Step** 11.

3.4 Module C: Determining Other Response Authorities

3.4.1 Introduction

A framework of federal environmental laws and regulations has been enacted to address releases or threats of releases of contamination into the environment. Each environmental statute has its own particular focus, whether it is to control the level of pollutants introduced into a single environmental medium (i.e., air, soil, water) or to address a specific area of concern, such as pesticides or waste management. ERPMs should understand the regulatory requirements developed pursuant to these environmental laws and the response authorities each law provides. You should use this module as an overview of the other response authorities available to you in addressing releases at DOE facilities. This module, however, should supplement rather than supplant the regulations promulgated under other environmental statutes and the relevant guidance for using response authorities other than CERCLA.

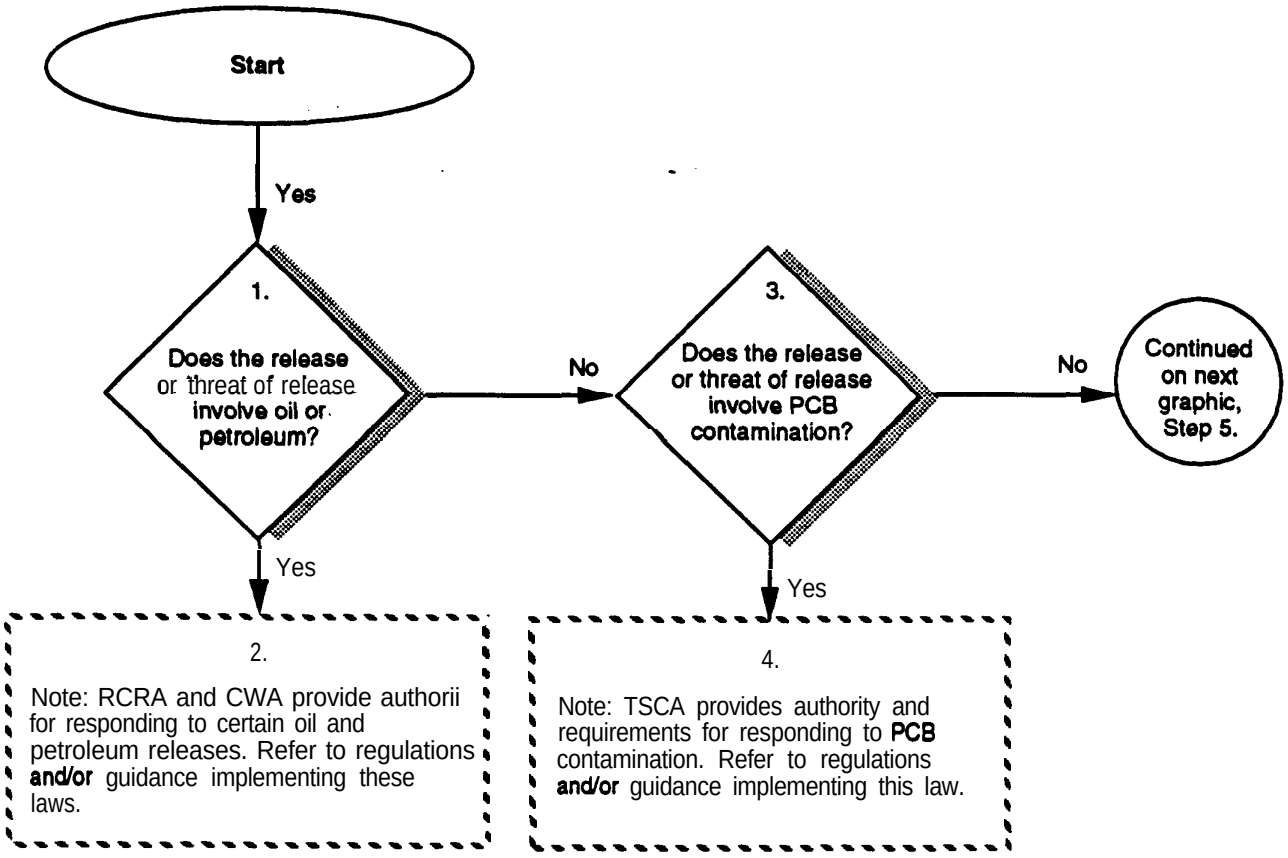
3.4.2 Milestones

If CERCLA does not apply, the ERPM should ask the following questions to determine if other response authorities may be available:

- Does the release or threat of release involve oil or petroleum?
- Does the release or threat of release involve a hazardous waste or material?
- Does the release or threat of release involve polychlorinated biphenyl (PCB) contamination?
- Does the release or threat of release involve radiological materials?

The following flowchart guides you through the process of determining response authorities other than CERCLA that may be available.

Figure 3.4(1)
Determining Other Response Authorities



3.4.3 Determining Other Response Authorities

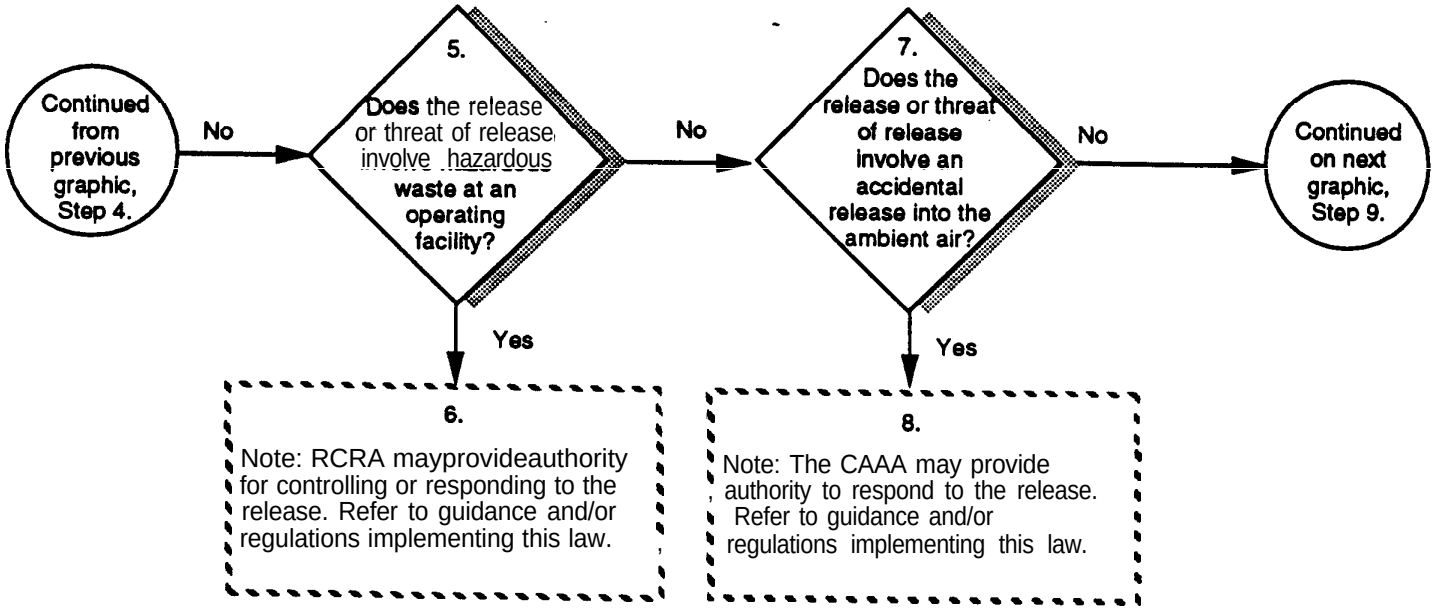
Step 1 Releases or threats of releases of oil and petroleum products cannot be addressed using CERCLA authority. EPA Directive 9838.1 (July 31, 1987) interprets the "petroleum exclusion" to apply to materials, such as crude oil, petroleum feed stocks, and refined petroleum products, even if a specifically listed or designated hazardous substance is present. However, EPA does not consider materials, such as waste oil, to which CERCLA hazardous substances have been added, to be within the scope of the petroleum exclusion.

Step 2 Response to releases or threats of releases of petroleum or hazardous substances from underground storage tanks (USTs) is typically managed under RCRA Subtitle I. Hazardous substance releases from tanks are subject to CERCLA, as well. Response requirements include controlling the source, determining the extent of contamination, determining the extent of response required, and performing the necessary response activities. DOE guidance entitled *Regulated Underground Storage Tanks*, June 1992, provides detailed information on managing USTs under RCRA Subtitle I. The CWA, as amended by the Oil Pollution Act of 1990 (OPA), provides the authority to prevent and remediate spills of oil or certain hazardous substances into the surface waters of the United States. Section 300.300 of the NCP provides the specific requirements for oil spill response. Since all CWA hazardous substances are designated as CERCLA hazardous substances, normally CERCLA authorities are used to respond to releases of all hazardous substances into surface waters.

Step 3 Certain releases of PCBs will fall under both CERCLA and TSCA authority. In these instances, EPA will require the release to be addressed under the provisions of the TSCA PCB policy, as well as CERCLA. For more information, the ERPM should refer to EPA Publication 9355.4-01FS, "A Guide on Remedial Actions at Superfund Sites with PCB Contamination," August 1990.

Step 4 Using the authority under Section 6 of TSCA, EPA has developed regulations governing PCBs. These regulations restrict the use of PCBs; require inspections, reporting, and record keeping; establish labeling and marking requirements; and outline disposal criteria. On April 2, 1987, EPA published a National TSCA Policy (52 FR 10686) (also known as the PCB Spill Cleanup Policy) encouraging rapid and effective cleanup and restoration of sites resulting from releases of materials containing PCBs at concentrations greater than 50 parts per million. Spills outside the scope of this policy (e.g., spills directly into surface water) are handled on a case-by-case basis by EPA. The ERPM should consult with the DOE Office of Environment, Safety, and Health in determining the appropriate response authority. In conducting all CERCLA responses, TSCA is considered to be an applicable or relevant and appropriate requirement (ARAR).

Figure 3.4(2)
Determining Other Response Authorities



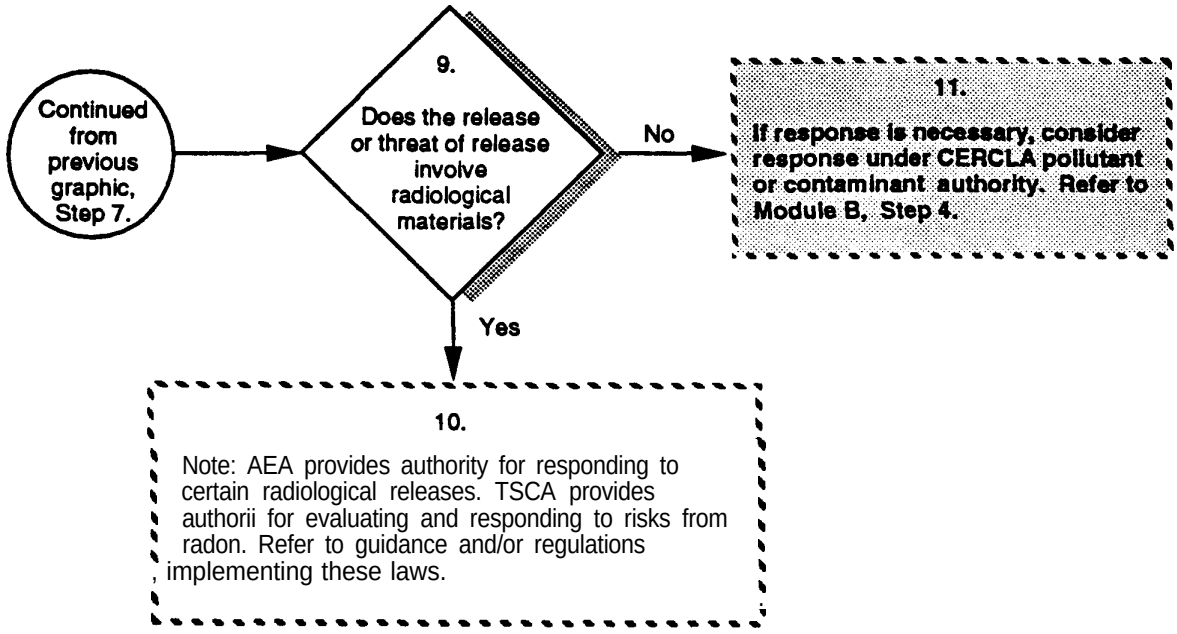
Step 5 RCRA authorizes corrective actions under an order or as part of a permit whenever there is or has been a release of hazardous waste or hazardous waste constituents into the environment. Corrective action can cover the full range of possible actions, from studies and interim measures to long-term, permanent cleanup.

Step 6 RCRA, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), provides a comprehensive approach to hazardous and solid waste management at operating facilities. RCRA Subtitle C-Management of Hazardous Wastes-provides the authority for the RCRA Corrective Action program. This response program is similar to response programs under CERCLA, but is limited to responses to address hazardous wastes and hazardous waste constituents. The Corrective Action program includes conducting interim measures or stabilization in response to releases. Interim measures or stabilization can be similar to CERCLA removal actions in scope and purpose. For further information on when to use RCRA corrective action authority, the ERPM should consult the DOE guidance entitled "RCRA Corrective Action Program Guide," August 1992.

Step 7 The Clean Air Act Amendments of 1990 (CAAA) require EPA to establish a program to prevent accidental releases of Clean Air Act (CAA)-regulated substances or CAAA-designated extremely hazardous substances into the ambient air from a stationary source.

Step 8 EPA must develop regulations to designate CAAA extremely hazardous substances, to develop a hazard assessment, to implement a release prevention plan, and to develop a response plan. When these regulations are in place, the response plan regulation should provide authority to respond to releases of these substances. Until EPA promulgates the requited regulations, **ERPMs** should consult with DOE's Office of Environment, Safety and Health to determine the appropriate response to **CAAA** extremely hazardous substances.

Figure 3.4(3)
Determining Other Response Authorities



Step 9 CERCLA and the AEA regulate certain radioactive substances. Many of the substances specifically excluded from CERCLA (e.g., source, byproduct, and special nuclear materials released during nuclear incidents) are regulated under the AEA.

Step 10 The AEA created a framework for federal regulation of the use of radioactive materials. Specifically, AEA outlines the federal and state responsibilities for controlling-source, byproduct, and special nuclear materials. This is accomplished through DOE Orders, which provide guidance and standards for managing radionuclides. Radionuclides are regulated under CERCLA as hazardous substances (see 40 CFR $302.4). DOE Order 5400.4, "The Comprehensive Environmental Response, Compensation, and Liability Act Requirements," October 6, 1988, establishes DOE's policy regarding CERCLA compliance at DOE facilities, including responses to releases of radionuclides not specifically exempted from CERCLA

Sections 300.130 and 300.175 of the NCP require that DOE, under the Federal Radiological Emergency Response Plan (FRERP), provide advice and assistance in emergency actions essential for controlling releases of source, byproduct, special nuclear materials, and other ionizing radiation sources. If a release involves these materials, the FRERP provides information on the specific actions to be taken.

Step 11 If a review of federal laws does not indicate adequate authority to respond to a release of a hazardous substance, the ERPM should determine whether a response can be taken under the CERCLA provision regarding pollutants or contaminants that pose imminent and substantial danger. Since the definition of pollutant or contaminant is broad, many releases can be defined as pollutants or contaminants.

3.5 Summary Milestones for Chapter 3

		YES	NO	N/A
Module A	**The ERPM should answer the following questions by gathering key information:**			
	Has the location-of the release or threat of release been identified?			
	Can the types of materials or specific chemicals be determined?			
	Has an estimate of quantities of materials released or threatening to be released been made?			
	What was the date and time of the release or threat of release?			
	What media have been affected by the release or threat of release?			
	Are there any known risks posed by the release or threat of release?			
Module B	**In determining if CERCLA authority applies, the ERPM should ask the following questions:**			
	Is the substance released or threatened to be released defmed under CERCLA section 101(14)?			
	Is the substance released or threatened to be released defined under CERCLA section 101(33)?			
	Are there any relevant exemptions to CERCLA authority?			
	Has the RQ been exceeded, thus requiring National Response Center notification?			

		YES	NO	N/A
	Have other appropriate state and local notifications been made?			
	Does the release pose an imminent and substantial danger to public health or welfare?			
Module C	**If CERCLA does not apply, the ERPM should ask the following questions to determine if other response authorities may be available:**			
	Does the release or threat of release involve oil or petroleum?			
	Does the release or threat of release involve a hazardous waste or material?			
	Does the release or threat of release involve PCB contamination?			
	Does the release or threat of release involve radiological materials?			

3.6 Sample Scenarios

This chapter has identified the types of information to be gathered from the release notification in order to categorize a release or threat of release, and has described how to determine whether CERCLA authority applies or whether other response authorities may be available. The following five scenarios provide examples of available response authorities and how to determine the appropriate responseauthority to use. .

Scenario 1: A total of 16 underground storage tanks containing gasoline were suspected to be leaking and contributing to area ground water and soil contamination. This situation was categorized as an environmental emergency under DOE Order 5000.3B. Since a CERCLA response cannot be taken to address petroleum products, DOE took action under Subtitle I of RCRA.

Scenario 2: Two damaged bottles of peroxidized ether were found in a small building at a DOE facility. The total contents of the bottles was significantly below the RQ for the hazardous substance. However, because of the significant fire/explosion hazard posed by the situation, DOE initiated an emergency removal action.

Scenario 3: During the transfer of radioactive byproducts from a DOE-operated nuclear power plant, a container of the radioactive materials was punctured and the materials spilled onto the ground. The ERPM consulted DOE Order 5400.4 and CERCLA sections 101 and 104 to determine the proper authority and procedures for responding to the release.

Scenario 4: A truck carrying chlorine overturned at a DOE facility. The ERPM responded and found that the chlorine was not leaking and that the containment seals were structurally sound. It was determined that a CERCLA removal action was not necessary to address the situation.

Scenario 5: A pipe leading from a DOE processing plant tank containing sulfuric acid burst, and 5,000 gallons spilled. As cleanup of the plant proceeded, the cleanup crew noted that approximately half of the acid had escaped the plant through a gap around a water pipe entering the building. At this point, the ERPM determined that a release into the environment of a hazardous substance exceeding its RQ had occurred. The ERPM notified the facility manager and then immediately notified the National Response Center, SERC, and LEPC of the release.

3.7 References

1. Code of Federal Regulations, Title 40, Part 300, National Oil and Hazardous Substances Pollution Contingency Plan (NCP).
2. Code of Federal Regulations, Title 40, Part 302, Designation, Reportable Quantities, and Notification.
3. Code of Federal Regulations, Title 40, Part 350, Trade Secrecy Claims for Environmental Planning and Community Right-to-Know Information: And Trade Secret Disclosures to Health Professionals.
4. Code of Federal Regulations, Title 40, Part 355, Emergency Planning and Notification.
5. Code of Federal Regulations, Title 40, Part 370, Hazardous Chemical Reporting: Community Right-to-Know.
6. Code of Federal Regulations, Title 40, Part 372, Toxic Chemical Release Reporting: Community Right-to-Know.
7. 15 U.S.C. §2601 *et. seq.* The Toxic Substances Control Act (TSCA).
8. 33 U.S.C. §1251 *et. seq.* The Federal Water Pollution Control Act (FWPCA) as amended by the Clean Water Act of 1977 (CWA).
9. 33 U.S.C. §2701 *et. seq.* The Oil Pollution Act of 1990 (OPA).
10. 42 U.S.C. §2011 *et. seq.* The Atomic Energy Act of 1954 (AEA).
11. 42 U.S.C. §6901 *et. seq.* The Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments (HSWA).
12. 42 U.S.C. §7401 *et. seq.* The Clean Air Act (CAA) as amended by the Clean Air Act Amendments of 1990 (CAAA).
13. 42 U.S.C. §7901 *et. seq.* The Uranium Mill Tailings Radioactive Control Act of 1978 (UMTRCA).
14. 42 U.S.C. §9601 *et. seq.* The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).
15. 42 U.S.C. §11001 *et. seq.* The Emergency Planning and Community Right-to-Know Act (EPCRA).
16. 52 FR 10686, National TSCA Policy, April 2, 1987.
17. 55 FR 51587, Hazard Ranking System: Final Rule, Appendix A, December 14, 1990.
18. U.S. EPA. A Guide on Remedial Actions at Superfund Sites with PCB Contamination (OSWER Fact Sheet 9355.4-01FS). Washington, DC: U.S. EPA, August 1990.
19. U.S. EPA. CERCLA/Superfund Orientation Manual (OSWER Publication No. EPA/542/R-92/005). Washington, DC: U.S. EPA, September 1992.

20. U.S. EPA. CERCLA Compliance With Other Laws Manual, Part 1 (Interim Final) (OSWER Publication No. 9234.1-01). Washington, DC: U.S. EPA, August 1988.
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22. U.S. EPA. Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions (OSWER Publication No. 9360.3-02). Washington, DC: U.S. EPA, August 1991.
23. U.S. EPA. Superfund Removal Procedures: Revision Number Three (OSWER Publication No. 9360.0-03B). Washington, DC: U.S. EPA, December 1988.
24. U.S. EPA. Scope of the CERCLA Petroleum Exclusion Under Sections 101(14) and 104(a)(2) (OSWER Publication No. 9838.1). Washington, DC: U.S. EPA, July 31, 1987.
25. U.S. EPA. RCRA Corrective Action Interim Measures (OSWER Publication No. 9902.4). Washington, DC: U.S. EPA, June 10, 1987.
26. U.S. DOE. Order 5000.3B: Occurrence Reporting and Processing of Operations Information. Washington, DC: U.S. DOE, March 3, 1992.
27. U.S. DOE. Order 5400.4: The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Requirements. Washington, DC: U.S. DOE, October 6, 1989.
28. U.S. DOE. Emergency Planning and Community Right-to-Know Act (EPCRA) Guidance (DOE/EH/0181P). Washington, DC: U.S. DOE, March 1991.
29. U.S. DOE. Environmental Guidance Program Reference Books: Atomic Energy Act and Related Legislation (ORNL/M-1249), Revision 4. Washington, DC: U.S. DOE, June 1989.
30. U.S. DOE. Introduction to RCRA Corrective Action and the CERCLA Remedial Process (Draft). Washington, DC: U.S. DOE, 1991.
31. U.S. DOE. Regulated Underground Storage Tanks (DOE/EH-231/004/0191). Washington, DC: U.S. DOE, June 1992.
32. U.S. DOE. Remedial Actions at DOE Environmental Restoration Sites Contaminated with Polychlorinated Biphenyls (PCBs)—Memorandum from EH-231 dated November 24, 1992.
33. RQ-Calculator, developed by the U.S. DOE Office of Environmental Guidance, EH-231, available from the U.S. DOE Office of Science and Technical Information (OSTI) at (615) 576-8401 for U.S. DOE employees and their contractors.